

THE VILLAGE SETTING

TABLE I

162 Comparison of age-group distribution of Silwa Bahari and Egypt as a whole.¹

Age group	Percentage of Total Population	
	Silwa	Egypt
under 5	15.0	13.3
5-9	11.9	13.9
10-14	11.2	12.0
15-19	11.1	8.5
20-29	14.5	15.2
30-39	13.9	14.6
40-49	10.5	10.1
50-59	6.1	5.9
60 and over	5.7	6.3
unidentified ages	0.2	0.2

361 Like many other villages in Upper Egypt, Silwa lies at the foot of the Eastern Plateau. This physical setting divides the villagers' world in Silwa into three distinct parts: the 'hills', the villages, and the fields. The barren 'hills', with their rugged dark rocks, though a source of fear and apprehension to the children, are not so inhospitable for the adults who rely on the salty clay (nitrous soil) found in these hills for use as land fertilizer. The village itself is composed of compact houses built of sandstone, which is available in the environment. There is hardly any planning in the village scheme, except for three main streets cutting across the village from east to west and another main street leading from north to south; the first three forming the main routes from the village to the fields. The rest of the byways between the houses are narrow and twisted and are occasionally interrupted by heaps of stones and rubble. After 1936, owing to the increase of village population, a new space between the old village and the railway line was allotted free by the government for building purposes. Most of this space has been built upon and inhabited mainly by those married sons whose parental homes have not sufficient room for their accommodation. However, the finest buildings in the village are the two mosques. With whitewashed walls, elegant and dignified minarets, and a floor covered with mats, these mosques represent one of the most cohesive forces in the life of the villagers - religion.

¹ Here the percentages in Silwa are worked out from the figures given for 1937, but those of Egypt from the figures of 1937. Thus one could assume that the percentages of age groups have not radically changed. On the other hand, there are no details about age groups in Silwa in the 1937 Census.

THE FELLĀHIN OF UPPER EGYPT

403 instance, thinks he would like to add to his own property by
518 stealing a portion of his neighbour's he will surreptitiously shift
685 his boundary stones farther on to the adjoining land. This is,
of course, quickly detected by the man whose land has been en-
croached upon, and a bitter dispute will follow, which may end
in a violent quarrel.

407 The plough which is in common use at the present day is a
231 primitive, but quite adequate, machine (Fig. 97). It is made en-
241 tirely of wood, with the exception of the share, which is tipped
with iron. It is generally drawn by oxen, but in Upper Egypt I
have seen more than one plough with a camel and a donkey yoked
together, a some-
what incongru-
ous pair! The
peasant follows
on foot, guiding
the plough, and
usually singing
as he works.
Except during
the inundation



FIG. 97. A PLOUGH AS USED TO-DAY

the work in the fields is incessant, for, owing to the very fertile
soil, one crop can follow another in quick succession.

The watering of the fields is very strenuous work, the commonest
machine used for this purpose being the *shādūf* (see Fig. 13, right,
and Fig. 108), a primitive water-hoist. It consists of two upright
wooden posts, or pillars, made of mud and *būs*, connected by a
horizontal bar, across which is slung another bar, or a stout branch
of a tree, weighted at one end with mud and stones, while from the
other end is suspended a leather or basket-work bucket. The man
working the *shādūf* pulls down this bucket into the water (either
river or canal), and, when it is full, allows the weighted end to
raise it to the level of the land. He then pours the water into a
prepared channel, through which it flows in the required direction.

CHAPTER II

THE PHYSICAL BACKGROUND

EGYPT AN AGRICULTURAL COUNTRY

1. - Geography

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177 There has been much talk of the industrialisation of
565 Egypt. The progress of the last five years is as wide-
241 spread as it has been rapid. An industrial proletariat has
emerged, a native working class, which is worthy of study.
But the absence of iron and coal mines has prevented this
country from becoming, properly speaking, an industrial
centre, and even from being able to satisfy the needs of
its own population in manufactured goods. It is and will
be for some time to come primarily an agricultural country.
This results from its physical structure (*).

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133 By reason of its flat surface, its rich, damp loam, its
134 fertilising river, and its warm, dry climate, Egypt is geo-
graphically suited for wide and intensive cultivation, and
its soil can bear crop after crop without failing.

Were it not for the fertilising Nile, the one artery of life
which flows across this desert area of Africa, Egypt, like her
neighbours Arabia and Libya, would be little more than a
vast expanse of sand, granite, and limestone, in itself useless
for either agriculture or industry, — a poverty-stricken land
of nomads and shepherds.

Though the Nile has its source outside the land of
Egypt, it is to Egypt that its fullness belongs. It enters
her boundaries after a journey of 3,000 miles with a rich load
of silt drawn from the most varied types of soil. It renews
itself year after year, and its rise and fall is the pulse of
Egypt's life.

The silt, brought from the south and carried down on
the flood, has been deposited by the Nile in alluvial strata,

since the last phase of the quaternary period, over the flat edges of its bed, and spread out in ever widening layers across its mouth, encroaching on the sea (*).

These deposits have created on top of the granite, limestone or sand a layer of black earth, varying in depth between 10 to 30 metres in different regions.

The Nile soil which thus covers the valley consists of both coarse and colloidal clay, with an admixture of various salts. It is an amalgam of finely ground particles carried down by the Blue and White Niles. The composition of this arable soil, unlike that of most agricultural countries, is substantially the same everywhere. It has a high mineral content, which, as we shall see later, has an important influence on the food of the fellah.

This soil, once deposited, is continually irrigated and enriched by the Nile, by means of either flooding or canalisation, but always under the control of man. The time-honoured system of basin irrigation, still in use over a million feddans, consists in discharging the water at flood-time through small channels on to *hōds* — vast areas of land surrounded by dykes. The land absorbs water until it is saturated; then the remainder slowly drains away, after depositing a layer of the fine silt with which the water was laden before flowing into the basins. Each feddan thus receives about 7,000 cubic metres of water, which leave 8 or 9 tons of silt. Immediately after the water is drained off (about November) the crops are sown. They are then left to ripen until harvest-time without needing any further irrigation. The land then lies fallow till the next flood. However, many of those who farm basin land, in order to produce a summer as well as a winter crop, make use of the underground water by means of pumps, which are now so common that they have modified the system of cultivation in these districts.

The perennial system of irrigation, introduced in 1840, and made possible through engineering works, of which the most notable is the Aswan Dam, now covers all the Delta and the greater part of Upper Egypt (4,300,000 feddans). The Nile no longer completely floods the land. Its water is stored in reservoirs, then distributed through barrages into a network of canals which water the land throughout the year.

241' Thus at High Nile (August to October) the fields are
 132 no longer flooded, but only irrigated, and bear the crops called
sifi. When the flood is over, and the level of the flood is
 falling (November to April), the land, being still moist,
 receives sufficient water for the winter crop (*ashai*). At
 Low Nile (April to July) the reservoirs are gradually emptied
 to provide water for ripening a third crop, called the summer
 crop (*sifi*).

132 To be fruitful, the land needs not only water, but also
 134 air. The sun, by the vertical cracks its summer heat makes
 in the level soil, plays its part in reviving the fallow land.
 It removes excess salt and mellows the soil by letting the
 air penetrate deeply into the earth, so that the land is de-
 hydrated and renewed (').

We thus see the Nile, helped by the sun, already at
 work preparing and cultivating the land, and so determining
 the fellah's physical environment, the living Egypt.

133 In fact, wherever the Nile does not penetrate, either
 from above or below, the desert begins abruptly, without any
 intermediate zone. The conventional colourings of maps,
 which show Egypt as a thin green strip across a great
 dun-coloured space, correspond exactly with reality. From
 the top of the Great Pyramid near Cairo, or from the hills
 of the Sa'id (*), one is struck, whichever way one looks,
 by the clear line of demarcation where human labour and
 habitation stop short. Between the cliffs of the Libyan and
 Arabian deserts lies a level valley, 650 miles in length. Its
 width is less than a mile at Wadi-Halfa (*), 3 miles at Edfu,
 about 8 between Luxor and Assiut, where it narrows again,
 and 15 at Beni-Suef, whence a branch goes off westward to
 the Fayûm. From Cairo it spreads out fanwise to form a
 coast-line of 160 miles at the north of the Delta. In all
 there are some 12,000 square miles of good land, lying in
 the midst of about 400,000 square miles of barren sand.
 This 3% of the whole area represents the living and pro-
 ductive Egypt.

Its shape is given to it by the Nile. It looks like a giant
 lotus, whose roots, the White and the Blue Nile, are planted
 in the heart of Africa, in the high mountains of Abyssinia
 and the great lakes of the Congo. From Khartoum the sap
 rises along a single stem, which pushes into Egypt at Wadi-
 Halfa, shows signs of green at Aswan, bears a single leaf

we shall probably be rather under- than overstating the case if we reckon the agricultural population, which is the subject of our enquiries, at twelve million souls.

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Moreover, this population is increasing. Less rapidly, it is true, than that of Cairo, where between 1917 and 1927 the increase was 28%, while in the country it scarcely exceeded 10%. But in the city the rise is largely due to an influx from abroad and from the countryside; in the country it is dependent on the birthrate alone.

Thus the rural density of population is about 1300 persons to the square mile ("). Such a situation is probably without parallel except in Tonkin, where six million peasants live on 5150 square miles, giving a density of 1165, or 93% of the population on 16% of the territory. Of this mass three millions live at a density of 1400, and more than one and a half millions at 2800 (").

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The density of population in the Nile Valley is explained by the concurrence of all the conditions, geographic, economic and social, which favour a high birthrate. The climate is warm, the valley itself is flat, uniform, tractable and strictly defined. There are plentiful food crops which can provide locally for a numerous population; maize, corn, rice, lentils and beans grow throughout the country.

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The cultivation of cotton necessitates a settled concentration of workers, whose labour may bring considerable profit. The perennial irrigation system on the one hand requires many labourers, and on the other hand, by raising the productivity of the soil, makes it possible for more people to live on it. The soil is divided into many small properties, either rented or privately owned. These small holdings only accentuate the overcrowding which causes them. Help is wanted as cheap as possible; children can provide it. Thus the fellah is forced by the exigencies of the land to have children, and as many as possible. This for him is the meaning of marriage and the family. Where all these conditions exist together, as in the province of Menoufiya in the Upper Delta, where the land has been longest cultivated and irrigated, where cotton is the chief crop and small holdings are the most numerous, a density of over 2,000 to the square mile is to be found (").

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Where favourable conditions are fewer the density grows less. This is so in the South, in the districts above

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162 and below the cataract of Aswan, where the land is less rich
 134 and is still under the system of basin irrigation and large, semi-feudal estates. In the province of Aswan there are only 305,195 inhabitants to 224,000 feddans. This gives about 800 to the square mile. But the lowest rural density occurs in the lake region of the North, where the lands are low-lying, salt and marshy. Near Kafr-el-Dawîr, not far from Alexandria, it is only about 500 to the square mile.

311 This uneven distribution, though it may be explained
 162 by physical conditions, is not finally determined by them. In the outlying districts which we have just mentioned the full capacity of the land is far from being reached.

181 There is still another factor of prime importance to
 166 be considered — habit. Time as well as place has its influence
 464 on human psychology. The fellah has a stable, unadventurous disposition. He stays tied to his native village, which represents for him the security of both past and present. Unlike the Palestinian or Syrian peasant, he never emigrates to try his luck. He will never even take a job in another province where there is a demand for labour, unless he is pressed into it by force. If he does leave his native *balad*, it will not be for another country district, which could never be as good as his own, or afford him a better life or income; he will make for the town, and by preference for Cairo. So migration is comparatively rare, and owners of newly reclaimed land (*barâri*) find great difficulty in securing sufficient hands, despite the good pay and housing they offer.

Rural, gregarious, stay-at-home; such is the Egyptian people in its dominant characteristics. These qualities have contributed as much as the needs and possibilities of the soil to cause the over-population of the country.

162 Over-population, however, is a relative term, and there are a number of factors to be taken into account.

312 The adoption of perennial irrigation has made possible
 241 a more intensive exploitation of the most fertile land. Thus the area actually cultivated remained more or less stable between 1930 and 1940 at an average of 5,353,500 feddans; however, since much of this land produced two crops in the course of a year, the crop area, as it is called, rose to close on eight and a half million feddans.

At the same time the use of chemical fertilisers and the improvement of the drainage system raised the average yield per foddan. Between 1932 and 1939 the yield of all crops showed a distinct tendency to rise, only to fall again sharply in 1941, after imports of fertilisers had been drastically cut down.

Again, although the area actually cultivated averaged only 5,353,500 feddans between 1930 and 1940, there are in all 7,100,000 feddans which are classed as cultivable. The surplus of 1,750,000 feddans consists largely, no doubt, of inferior land, but if energetic measures were taken a great deal of it could be worked economically. Even should the limit be reached there still remains the Sudan. This vast and under-populated country is really an extension of Upper Egypt, which it resembles.

If present trends continue, however, these favourable factors are likely soon to be neutralised by the constant increase of the fellah population. Although the birthrate shows a tendency to fall, the gross rate of increase rose from an average of 188,000 a year between 1927 and 1937 to about 250,000 a year between 1937 and 1941.

Year	Population	Increase	Percentage Increase	Mean Annual Percentage Increase
1897	9,714,525	2,910,504	—	—
1907	11,287,359	1,572,834	16.2	1.62
1917	12,750,918	1,463,559	13.0	1.3
1927	14,217,864	1,466,946	11.5	1.25
1937	15,932,694	1,714,830	12.1	1.21

It is clear that sooner or later, if the present standard of living of the fellaheen is to be maintained, let alone raised, the problem of over-population will become acute. The pal- liatives we have mentioned will not suffice for long. More drastic measures will have to be taken: on the one hand the industrialisation of the country, to create a better balance between industry and agriculture and to raise the general level of production; and on the other hand a policy of re-allotment of land, permitting more intensive cultivation by smallholders, and better distribution of the products. The consideration of such remedies, however, lies beyond the scope of this book.

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369 In a diversity so inorganic the various groups meet or overlap without real relationship or interpenetration, without even real knowledge of one another. The townspeople of Cairo and Alexandria know the countryside only by glimpses caught through a train or car window. The fellahen, shut in by their fields and villages, know nothing of the city except through the 'omda, the Greek grocer, or the landlord's agent.

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Even in Cairo or Alexandria, where the aristocracy of Egypt is gathered together, the various groups only touch at their edges. Each lives in its own way, and is self-sufficient. Each has its own mentality, and its own 'Egypt'.

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369 On the one hand there are the Egyptian groups. These may be either Copts or Moslems. The sphere of the great landowners is not the same as that of Government officials. The clerical milieu of Al-Azhar is worlds away from the lay society of the Egyptian University. At receptions and festivities there are still only men present. Women have their own distinct groups. There is also the Palace, and the separate circle of the Princes.

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567 Then there are the foreign communities. These are certainly Egyptianised to some extent, but this is their only point in common. Each has its own clearly defined characteristics. The Syrians are active business men. The Jews are influential financiers. The English keep their distance at the Turf Club. The French and Belgians are concerned with the big companies — the Gas, and Water Companies, the *Crédit Foncier* ("), the Sugar Refineries, the Suez Canal — and the Italians are in building and commerce. The Greeks, who are more numerous, come closer to the masses of the people.

All these, which are essentially urban groups with their own characteristics and their own capital, act as a kind of leaven in the economy, finance and politics of Egypt. They are not a leaven to its people, for they never even mix with Egyptian society, and their progress leaves the fellahen unmoved. Only from the outside and at a distance, through numerous intermediaries, do they knead the masses and take from them what they have to give.

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421 The source of Egypt's wealth is the soil, and what it yields to the fellah's labours. But we must examine first of all the ownership of this soil. The whole structure of an agricultural country is built on its law of property.

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Turkish Egypt MR2

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423 affirmed it by selling plots of State land to small farmers year by year.

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661 At the same time the rate and the method of taxation remained arbitrary, and the whole system had become thoroughly corrupt. The High Commission of Enquiry into Property Taxation (1878-1890) discovered widespread abuses in every province. Agricultural production was suffering, and some form of equalisation was becoming an urgent necessity. But first of all a new survey had to be carried out, more scientific than that of Mohammed Aly, which was too legalistic in its distinctions.

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651 In 1892 the Survey Department, under the direction of English engineers, undertook the immense task of demarcation. After due consideration of roads, canals, and natural boundaries, the land of each village area, called rimam, consisting on an average of 2,000 feddans, was divided into sections (*hods*) of 50 to 100 feddans of equal value and quality (with a variation of no more than 50%) and marked off by iron boundary-pegs. The cadastral plan of the village was drawn to a scale of 1:25,000 for all agricultural areas, then plot by plot on a scale of 1:2,500. It defined every *hod* with its serial number and taxable value. The village site was shown as a single area and exempted from taxation. The survey register annexed to the plan gave for each plot in the *hod* its position, its area in feddans and kirats, the exact tax and the owner's name (¹⁴).

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134 The work was completed in 1907, but in 1899 the Government already had sufficient data to establish a general rate of taxation, which was fixed at 28.64% of the revenue from the land, determined by its mean rentable value. The scale was fixed for 30 years.

This average, based on the estimates of Egyptian committees, takes into account the nature of the soil, its content of salt, sand and water, its distance from the Nile, and still more such factors of human geography as facility or difficulty of irrigation, the level of cotton production, proximity to town or village, the length of time for which it has been under cultivation, the availability of labour, communications and police, the balance of supply and demand; in a word, the factors which make the price of a feddan vary between L.E. 40 and L.E. 180. Twenty-two different categories of land have thus been established, and the rate of taxation,

based on the same scale of value, varies between 14 and 164 piastres. E
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Law No. 113, of 1939, fixed the new tax at 16% of the rentable value of the land, according to estimates made throughout the country by special commissions, and based on the average rentals for the previous ten years. However, as before, the maximum tax cannot exceed 164 piastres per feddan. E
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There was no change in the date-palm tax, which until 1920 stood at 21 piastres per tree, with a five-yearly census; or in the irrigation tax, viz 50 piastres per feddan where *sifi* irrigation could be carried out by natural means (free flow), and 30 piastres for land to which the water had to be raised by mechanical means (lift flow).

Rebates are provided for when crops have deteriorated owing to lack of water, or where irrigation would have been unduly expensive. The tax is payable by the owner alone.

The date of payment, as well as the rate, is fixed beforehand. It varies for each province, according to the times of the main harvests, and payments are made by instalments, so that at the end of the year the whole amount due for the 24 kirats composing each feddan is paid up. For example in Qalioubiya two parts are payable in January, three in March, three in April, eight in October and eight in November.

The tax is collected at the owner's house by a *sarraf*, and the demand note (*wird*), when countersigned, serves as a receipt. If, as often happens, payments are in arrears, the Government obtains payment by distraint and forced sale. For example, to take the *Journal Officiel* for January 1937 only, there are 732 seizures listed, almost all of quite small holdings. These seizures are always advertised in the same terms:

'January 19, 1937. 3 kirats belonging to Imam Imam Ibrahim, situated in the village of Kafr Mansour, Toukh Markaz, in Medawwar *héd* No. 4, Lot 19, seized according to *procès-verbal* of March 2, 1936, in payment of arrears. Price L.E. 9.600 for the portion seized.'

The Government shows more patience with big land-owners. 'It is not just', a *sarraf* once admitted to me. In practice there may be injustice, but the rate of taxation is quite just, and except in times of crisis not unduly high.

CHAPTER IV

THE FELLAH AT WORK

The preceding chapters have given a general picture of the physical and social environment of the Egyptian peasantry. Thus the problem has been stated and approached. We can now attack it directly, by considering the fellah himself, first of all at the work from which he derives his name.

The Arabic word *fellah*, which has passed into most modern languages, is the intensive adjective of the verb *falaha*, which means to till the ground, labour or toil.

As the reader will have already observed, the fellah is looked upon primarily, if not exclusively, as a 'hand' or agricultural machine. As "economic man", he is equated with labour.

The work of the fellah, even more than his physical and mental make-up or his habitat, is determined by the environment we have been considering. It seems in fact the more consequence of the opportunities and limitations created by the soil and by society. His work will thus lead us to the consideration of the fellah as a human being, for it is he who in return carries on the work of the soil and adapts it to human needs. We have here a clear case of reciprocal festivals, interaction.

1. Methods of Work

The dark soil is not only productive, but also exacting from one year's end to another. The fellah, who is obliged by the Koran to take a weekly day of rest, works the whole year round, and takes a holiday only at the great festivals, that is to say about ten days in a twelvemonth.

The sun shines for at least eleven hours a day, and in May, June and July nearer fifteen. The fellah spends far the greater part of his time in the fields, and for some kinds of work stays there all night.

MANURING

Watering is not enough; the soil needs nourishment to make it productive. The fellah knows only too well that the fertilising powers of the soil must be revived. Together with his wife and children he does his best to find, at as little expense as possible, as much animal or chemical manure as he can. 241
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Pigeon droppings, silt cleaned out of canals and mixed with grass, and, above all, soil impregnated with stable-dung (*sebâkh bâladi*), (but never human excrement), village débris and age-old dust, all contribute nitrogen to his field. The rubbish mounds (*koms*) of dead cities become quarries to which the fellah turns for his manure. This *sebâkh kufri*, as it is called, is found in varying qualities all over Egypt; but nowadays most of what is left is of poor quality.

In the cliffs of Upper Egypt there is also a kind of sand (*marog*) and a clay (*tafla*) which serve as a poor manure, and need much labour to bring to the fields. But all these manures are lacking in salt content. The used-up soil needs artificial remedies. Despite the fellah's hidebound methods his sympathy with the soil has helped him to understand its need. Since the early years of this century, good *sebâkh kufri* having become almost unobtainable, he has begun to use chemical manures (*semâd*). Before the present war (1939), Egypt used to import more than half a million tons of natural nitrates from Chile, the earliest known source, and synthetic nitrates from Germany and England. These may be used on all except leguminous crops (*berseem*, fenu-greek, and beans), which need phosphates. 241
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The distribution of *semâd* is most efficiently organised by the *Crédit Agricole d'Egypte*, which sells it by the sack on credit, and also by the Royal Agricultural Society and the big import firms. There are about 2,000 depots spread all over the country. The chief customers are the big landowners and the State Domains, which advance to the owners and tenant farmers the amount required for each holding against part of the crop. Before the war a sack of 100 kilograms, delivered to the village, used to cost from 65 to 70 piastres. Corn crops require the most expensive fertilisers, but the cheapest qualities are good enough for *berseem*. 241
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5. T.—Iron ore of excellent quality and in great abundance has recently been discovered in the Western Desert near Aswan; the projected electrification of the Aswan Dam would provide power for smelting it on the spot. The author's original text, which excluded the possibility of far-reaching industrialisation, has accordingly been modified. [135]
6. P. Bovier Lapierte : L'EGYPTE PRÉHISTORIQUE in PRÉCIS D'HISTOIRE D'EGYPTE, Vol. I, pp. 9-14.
7. Mosséri and Audebeau : THE FUNCTION OF CRACKS IN THE SOIL IN THE DRYING AND PERMANENT PURIFICATION OF THE LAND IN EGYPT, in BULLETIN DE L'INSTITUT D'EGYPTE, Vol. V (1922-3), pp. 9-19.
A. Demanšéon ; PROBLÈMES ACTUELS ET ASPECTS NOUVEAUX DE LA VIE RURALE EN EGYPTE, in ANNALES DE GÉOGRAPHIE, Paris, March 1926, pp. 155-173.
8. 'The word SA'ID signifies a raised area of land. The same word also means the surface of the soil, good earth, any good area of land. It was applied by the Arabs in the time of Islam to the southern part of Egypt, because this part is raised above the rest of Egypt. The SA'ID is also known by the name of the Southern Region.' Maqrizi : TOPOGRAPHICAL AND HISTORICAL DESCRIPTION OF EGYPT (14th Century). [33, 134, 103]
9. De Morgan : RECHERCHES SUR LES ORIGINES DE L'EGYPTE, Vol. I, p. 67.
10. A. Moret : THE NILE AND EGYPTIAN CIVILISATION, p. 468. 'On the numbers of the population in Pharaonic times the monuments tell us nothing definite. By analogy with modern times one may reckon that Egypt, properly so called, was able to feed eight million inhabitants under the Theban Monarchy.' [161]
Prince Omar Toussoun, in his MÉMOIRES SUR LES FINANCES DE L'ÉGYPTE DEPUIS LES PHARAONS JUSQU'À NOS JOURS, reckons the number at eighteen millions.
11. 'Suffice it to say that a village which once contained 10,000 souls seemed to the passer-by nothing but a rubbish-heap ; sometimes a few solitary people were to [162]

NATIVE PLOUGH IN EGYPT

BY

MOHAMMED RIAD

Since millenia the cultivable soils of Egypt is confined to the Delta and the Valley of the Nile. This soil was deposited by the Nile through immemorial times and as a result it is composed, generally speaking, of nearly homogeneous fine particles which attain a mean depth of about 10 metres. The fact that such thickness and homogeneity of the cultivated soils rendering the minimum of soil variations has contributed much to the form and technique of the prevailing plough in Egypt. In fact the Egyptian plough is a simple one which is used to break the soil and not like other contemporary ploughs in Europe and elsewhere, does not invert the soil. This may be due to the aforementioned reason, i. e., the homogeneity of the soil, as much as other physical factors foremost among them are the yearly deposition of new soils through the agency of the flood on the one hand, and the penetration of air through the soil particles during the inter-planting period on the other hand. These factors and others did not necessitate deep ploughing or soil inversion, and as long as these factors remained in control of the type of cultivation in Egypt - which it did all over the history of agriculture in Egypt, due to the system of Basin Irrigation, - the evolution of the Egyptian plough was and is very slow in what concerns the major lines of form and technique. Yet there exist in Egypt at the present time two substantially different types of ploughs which function in similar physical conditions but exist in different regions. Building a co-existence among these two plough types, mixed offshoots arose to balance the picture and to ease the sharpness of plough boundary in the relatively small cultivable area of Egypt. Now we can differentiate at least seven plough types each with a limited geographic area.

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